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The impact of visitors' experience intensity on *in-situ* destination image formation

Abstract

Purpose – This study aims to shed some light on destination image formation by exploring whether image is altered as a result of tourists' experience intensity with a destination.

Design/methodology/approach – A visitor experience intensity index was developed based on the amount of events and attractions visitors have already attended/visited or were planning to attend/visit during their stay. The data was collected using self-administered questionnaires and the total sample consisted of 400 tourists in Linz, Austria. Principal Component Analysis, MANOVA and Discriminant Analysis were applied to analyse the data.

Findings – The findings indicate that the higher the experience intensity score, the more favourable the cognitive and affective evaluations of destination image, indicating that tourists' experiences are central in the formation of the in-situ image.

Research limitations/implications – The 'level of psychological involvement' with the destination should be considered by future studies, as this paper focused on level of experience intensity.

Practical implications – This paper supports the effective and innovative solutions for place marketing and branding of tourist destinations such as promoting experiences that further enhance destination image. The study also assists places with bad reputation or negative image, like the selected case study (Linz, Austria), in repositioning themselves as attractive experience providers.

Originality/value – The paper's originality lies in applying 'mere exposure theory' in tourism and using an innovative way of measuring tourists' experience through an intensity index. The study addresses a significant, but still neglected image determinant, that of experience intensity, contributing to a better understanding of the in situ destination image formation process.

Paper type - Research paper

Keywords: Visitor experience intensity, impacts, tourist destination, mere exposure theory, cognitive and affective image, Linz, Austria

1. Introduction

Destination image as perceived by potential or actual tourists is considered critical by destination management organizations, destination marketers and planners as it is known to determine tourist's destination choice (Pike, Gentle, Kelly, & Beatson, 2018). Moreover, destination image is reported having an impact on the level of satisfaction with the trip and positive future intention (Chen & Phou, 2013; Michael, James & Michael, 2017; Prayag & Ryan, 2012), and stimulate positive purchasing intentions towards products made in the destination country (Nisco, Mainolfi, Marino, & Napolitano, 2015). Most researchers largely agree that image is dynamic in nature evolving over time and space (Gallarza et al., 2002; Stylidis & Cherifi, 2018). A plethora of studies have empirically confirmed its fluidity by contrasting destination image before and after tourists' visit (Andreu, Bigne, & Cooper, 2000; Iordanova & Stylidis, 2017; Tasci, 2006; Vogt & Andereck, 2003) or across the time span (pre, in situ and a posteriori) of a trip (Kim, Stylidis & Oh, 2019; Smith, Li, Pan, Witte, & Doherty, 2015). Additionally, some studies compared destination image between first-time and repeat visitors (Chon, 1991; Fakeye & Crompton, 1991) and between visitors and non-visitors of a given destination (Baloglu & McCleary, 1999; Beerli & Martin, 2004; Konecnik & Ruzzier, 2006; Stylidis & Cherifi, 2018; Tasci & Gartner, 2007). The vast majority of these studies concluded that changes in image take place over time, highlighting the central role that tourist's direct experience with the destination plays in image formation and subsequent behaviour (Smith et al., 2015).

Previous research, however, has captured tourist's destination experience as previous visitation failing to consider the level of intensity of the visit and to explore its effect on image formation. As a result, empirical research on tourist's in-situ image development based on their on-site experience is lacking in general (see Smith et al., 2015; Vogt & Andereck,

2003). To this end, Martín-Santana, Beerli-Palacio and Nazzareno (2017, p.16) suggest that “there are no works that have tried to analyse how the intensity of the visit influences the image.” In an attempt to fill in this research gap, experience intensity is defined here as the number of actual events attended and attractions visited (or those planned to attend) by tourists at the destination. The study's conceptual framework is based on Zajonc's (1968) ‘mere exposure theory’ and the premise that a positive relationship exists between destination image and the number of activities (events and attractions) visitors engage in at the destination (Andsager & Drzewiecka, 2002; Ashworth, 1989). This is further supported by a number of studies which have found a positive link between event image and destination image (Kaplanidou & Vogt, 2007; Kim & Morrisson, 2005; Kim, Kang & Kim, 2014; Richards & Wilson, 2004), and studies that have documented how attractions can be used for destination image building (Pralhad & Ramaswamy, 2004; Qu, Kim, & Im, 2011).

This study especially focuses on visiting attractions and events considering their centrality in tourism destination image. Attractions are regarded key tourism sources and the ‘first power’ in satisfying visitors (Garrod, Leask, & Fyall, 2007). Many destinations, for example, build their destination branding strategy on and around major attractions (Weidenfeld, Butler & Williams, 2016). Similarly, events are known to positively affect the image of tourist destinations and are often used by place marketers to build or enhance destination image (Chalip & Costa, 2005; Jago, Chalip, Brown, Mules & Ali, 2003; Kaplanidou & Vogt, 2007; Xing & Chalip, 2006). Kim and Morrisson (2005), for instance, examined the potential image change of South Korea as perceived by Japanese, Mainland Chinese and US tourists as a result of hosting the 2002 World Cup. All three groups of tourists were reported having more positive images of Korea after the 2002 World Cup. Tourism product-related experiences accumulated by visitors, like attractions and events, are thus expected to contribute to

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increased levels of awareness, affection and favourable perceptions of destination image (Andsager & Drzewiecka, 2002; Baloglu, 2001).

The aim of this study is, therefore, to shed some light on destination image formation by exploring whether image is altered as a result of tourist's experience intensity with a destination. To achieve this aim a visitor experience intensity index was developed and applied based on the amount of events and attractions visitors have already attended/visited or were planning to attend/visit during their stay. This research endeavours to contribute to the existing literature on tourist's experience and destination image by a) exploring the application of the 'mere exposure theory' in the tourism marketing field; b) presenting an innovative method of measuring visitor's experience intensity in the form of an index capturing both attended or planned to attend attractions and events; and c) exploring the nature and the nuances of the relationships between cognitive and affective destination image components and visitor's experience intensity, which remain unclear until now. It also manages to respond to recent calls for more studies on understanding how image evolves over the trip experience (Iordanova, 2017; Martín-Santana et al., 2017; Smith et al., 2015). A thorough examination of this link is needed since on-site experience accumulated at this stage and the subsequent image developed will influence, to a great extent, visitor's perceived quality and satisfaction with the trip (Chi & Qu, 2008; Styliadis et al., 2017). These, in turn, are known to affect future behavioural intentions, including intention to revisit and willingness to recommend the destination to others (Chen & Phou, 2013; Chi & Qu, 2008; Prayag & Ryan, 2012). Such knowledge could prove beneficial for destination marketers in their efforts to strengthen the image of a place by applying targeted and cost effective marketing strategies (i.e., promoting experiences that further enhance destination image). An understanding of the link between experience intensity and destination image could also

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assist places with bad reputation or negative image, like the selected case study (Linz, Austria), in repositioning themselves as attractive experience providers (Avraham, 2015). Providing an understanding of the complex relationship between experience intensity and image is of vital importance for the success of any tourist destination.

2. Literature Review

2.1 Destination image: Definition and components

The concept of image has captured the attention of a substantial number of scholars and has been analysed from the viewpoints of a variety of disciplines including marketing, psychology, sociology, planning and tourism (Jenkins, 1999; Rodrigues, Correia & Kozak, 2011). Despite a number of attempts to define destination image, providing a commonly accepted definition remains a challenging task. Along with Gallarza, Gil and Calderon (2002, p.58) "there are almost as many definitions of image as scholars devoted to its conceptualization." In this research, Kim and Richardson's (2003, p.218) definition of destination image as "the totality of impressions, beliefs, ideas, expectations and feelings accumulated towards a place over time" was considered most relevant given the study's aim.

2.1.1 Cognitive destination image

There is an agreement in the literature that destination image is a subjective interpretation of reality made by the tourist (Bigne, Sanchez, & Sanz, 2001) and that both cognitive and affective evaluations of a place are of equal importance in the process of destination image formation (Baloglu & McCleary, 1999; Kim & Perdue, 2011; Stylidis, Belhassen, & Shani, 2017; Wang & Hsu, 2010). Knowledge/beliefs about a destination and its attributes (Baloglu, 1999; Gartner, 1993; Pike & Ryan, 2004; Richards & Wilson, 2004), or even memories, evaluations and interpretations of a place (Tasci, Gartner, & Cavusgil, 2007) represent the cognitive image component. Such place attributes, which can induce an individual to visit a destination include, among others, the climate, accommodation and entertainment facilities, as well as various forms of attractions (i.e., natural, cultural, historical, etc.) (Baloglu & McCleary, 1999; Stylidis et al., 2017). Tasci et al. (2007) further suggest that people's mental response involves not only beliefs/knowledge, but also memories, evaluations, interpretations

and decisions. The cognitive images need not to be representative of the reality or be accurate since beliefs reflecting the attributes of a place are based on personal views and not on objective truth, and are, therefore, highly subjective (Neal, Quester & Hawkin, 1999).

2.1.2 Affective destination image

Affective component is defined as “the appraisal of the affective quality of environments” (Hanyu, 1993, p.161) or as emotional reactions (Walmsley & Young, 1998), responses (Pocock & Hudson, 1978) and feelings (Russel, 1980) towards tourist destinations. The affective component of image has been commonly evaluated in the tourism literature using four affective image attributes (distressing-relaxing, unpleasant-pleasant, boring-exciting, and sleepy-lively) on a semantic differential scale (Baloglu & McCleary, 1999; Wang & Hsu, 2010). However, affective evaluations are not only limited to these adjectives, but can be extended to incorporate other words people use to describe the emotional qualities of a destination including peaceful, beautiful, exciting, majestic, enjoyable, hectic, frightening, frustrating, ugly, fearful, desolated, etc. (Russell & Pratt, 1980). Even though in everyday life people do not resolve image into cognitive and affective components, unless they are required to do so (Baloglu & Brinberg, 1997), the decomposition of image into these parts offers a better understanding of its structure and elements (Baloglu & Love, 2005) and supports in-depth analyses (Bagozzi & Burnkrant, 1985).

2.1.3 Conative destination image

The conative image component is considered to be analogous to behaviour (Sahin & Baloglu, 2011). Conative image has been well recognized in tourism studies (Gartner, 1993; Baloglu & McCleary, 1999; Gallarza et al., 2002; Tasci et al., 2007) as being dependent on the cognitive and affective image domains and represents the ‘decision stage’ of destination

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image formation. Tourists' behavioural intention is most often captured in the tourism marketing literature utilizing their 'intention to visit/revisit the destination in the future' and/or their 'willingness to recommend it to others' (e.g., Chi & Qu, 2008; Prayag & Ryan, 2012).

2.2 Destination image formation and destination experience

2.2.1 Destination image determinants

Tourism studies have explored numerous factors shaping destination image formation including previous experience/familiarity with the destination (Fakeye & Crompton, 1991; Kim & Morrisson, 2005; Smith et al., 2015; Tasci & Gartner, 2007; Vogt & Andereck, 2003) and information sources used (Alrawadieh, Dincer, Dincer, & Mammadova, 2018; Govers, Go, & Kumar, 2007; Llodra-Riera, Martínez-Ruiz, Jimenez-Zarco, & Izquierdo-Yusta, 2015). Moreover, a plethora of studies exist on the relationship between destination image and tourists' socio-demographic characteristics (Beerli & Martin, 2004; Bonn, Joseph, & Dai, 2005; Hsu, Wolfe, & Kang, 2004; Iordanova, 2017; Michael, James, & Michael, 2017) and motives (Martin & del Bosque, 2008; Tang, 2013).

2.2.2 Relationship between destination experience and destination image

Focusing on experience, the vast majority of studies investigating the effect direct experience with the destination has on tourism destination image compared visitors' and non-visitors' images of a tourist destination and produced contradictory results (Stylidis & Cherifi, 2018; Young, 1999). A stream of researchers did not find any significant differences in the image held by visitors and non-visitors (Andreu, Bigne, & Cooper, 2000; Chen & Kerstetter, 1999). A tenable explanation is that people are often bound by the image they have developed beforehand (Young, 1999). On the other hand, other researchers reported that visitors had

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more favourable destination image than the non-visitors (Fakeye & Crompton, 1991; Konecnik & Ruzzier, 2006; Tasci, 2006, Stylidis & Cherifi, 2018). Fakeye and Crompton (1991), for example, were among the first to report that there are differences between the image of a destination held by potential visitors, repeat visitors and non-visitors. Stylidis and Cherifi's study (2018) also indicated that such image differences between visitors and non-visitors occur regardless of visitors' nationality. In some cases, actual visitation seems to produce a more positive modified image (Kim et al., 2019).

Researchers further explored the impact of direct experience on the cognitive and affective components of image (Baloglu, 2001; Michael et. al, 2017; Prayag & Ryan, 2011). Past studies, in particular, reported that experience with the destination enhances tourist's perceptions of the two components of destination image (Baloglu, 2001; Smith et al., 2015). For example, Baloglu (2001) reported that differences exist in the cognitive and affective image components between visitors and non-visitors of Turkey, as visitors with high familiarity had more positive perceptions of Turkey than the non-visitors or those with a low level of familiarity. Such findings, however, were based on comparisons of images extracted from two different samples, that is, visitors and non-visitors of a tourist destination. This methodological approach restrains from fully understanding the dynamic nature of destination image, and in particular, how experience with the destination potentially modifies the image people hold of it (Kim et al., 2019).

To overcome this shortcoming a number of studies have explored the effect on-site experience has on destination image by comparing the pre-trip and post-trip images of the same tourist sample (Kim et al., 2019; Kim & Morrisson, 2005; Pearce, 1982; Smith et al., 2015, Tasci, 2006; Vogt & Andereck, 2003). Indeed, Chon (1991) found that people had

more positive post-visit perceptions of Korea than pre-visit. Vogt and Andereck (2003) and Vogt and Stewart (1998) compared tourists' pre-trip and in-situ images of Arizona and Missouri and unveiled that the cognitive image component changed during the course of a vacation but the affective image component appeared to remain rather constant. Smith et al. (2015) examined Canadian students' images of Peru during five different time frames and found that the cognitive image post-trip improved and surpassed the pre-trip one, whereas the affective image evaluation remained close to its pre-trip levels. Lastly, Kim et al. (2019) reported notable variations in Korean's perceptions of Vietnam image, with two trends being identified: on the one hand there were some affective and cognitive image dimensions that continuously improved throughout the trip, whereas some others, although improved while at the destination, remained stable thereafter.

This second stream of studies offer better insights into the development process of image and empirically support earlier conceptual models, which have underlined the central role 'actual experience' plays in image formation. Gunn (1972, p. 120), for instance, conceptualized the image development process encompassing seven stages termed "accumulation, modification, decision, travel to destination, participation, return travel, and new accumulation." Apart from Gunn (1972), Clawson and Ketch (1966), Chon (1991) and Iordanova (2015) models also highlighted the significance of the 'participation stage' or 'on-site experience and activities stage' on image formation. Considering that destinations are a combination of products, services and experiences provided locally (Buhalis, 2000), peoples' image will be altered by their first-hand experience as individuals engage with each component of the tourism product (Echtner & Ritchie, 1991).

2.2.3 *Mere exposure theory and destination image*

Visitors' first-hand destination experience seems to be related, among others, to their level of exposure to a destination. Exposure involves the extent to which we encounter a stimulus (intensity) and in line with the Signal Detection Theory (Green & Swets, 1966) the intensity of the stimulus is one of the two factors that influence its detection. Zajonc (1968) further elaborated on this premise and applied it to the field of psychology. In his seminal work the 'Attitudinal Effects of Mere Exposure', Zajonc (1968) described *exposure* as the condition which makes the given stimulus accessible to the individual's perception. Zajonc further argues that "mere repeated exposure of the individual to a stimulus is a sufficient condition for the enhancement of his attitude toward it" (1968, p.1). In a number of laboratory experiments he empirically demonstrated that simply exposing subjects to an increasing stimulus led them to rate it more positively. The 'mere exposure theory' has also found support in many experiments and studies across various disciplines and fields. For example, in consumer research (Tom, Nelson, Srzentic, & King, 2007), food preferences (Hausner, Olsen, & Moller, 2012), personal preference and trust (Kwan, Yap, & Chiu, 2015), music preferences (Schellenberg, Peretz, & Vieillard, 2008) and verbal learning (Grush, 1976). Heingartner and Hall (1974) found a positive relationship between exposure to excerpts of Pakistani folk music and peoples' assessment of this music's appeal. Similarly, frequent exposure to a brand was reported to increase consumers' preferences for it (Tom et al., 2007). Research so far has, therefore, documented that people, objects or ideas more frequently encountered in the physical and social environment are commonly more positively assessed (Tom et al., 2007).

However, the exposure-attitude relationship largely depends on the number of exposures to the stimulus. Some researchers have found that favourable ratings of the stimuli begin to drop after 10 exposures (Zajonc, Shaver, Tavis & Van Kreveld, 1972). Additionally, if the stimulus is perceived unconsciously, then it has larger 'mere exposure' effects in comparison to a stimulus that is perceived consciously (Bornstein & D'Agostino, 1992). Despite the merits of the 'mere exposure theory' and its wider application in several disciplines as discussed so far, to the best of the researchers' knowledge, it has never been applied to the context of tourist destination image. By applying the premises of the 'mere exposure theory' to the destination image field it can be argued that the more attractions/events a tourist visits while at a destination, the more knowledgeable (cognitive image) about the destination he/she will be. Moreover, increased engagement with the destination could lead to the development of stronger feelings and attitudes (affective image) towards that destination.

In support of this, Ashworth (1989) claims that there is a positive relationship between destination image and activities visitors engage in at the destination. As tourists directly experience the destination, they become aware of, and are exposed to places and activities they did not know about (Vogt & Andereck, 2003) further developing their knowledge and feelings about the place. Similarly, Fakeye and Crompton (1991) argue that the longer tourists stay at a destination, the more activities they do, which in turn, leads to more differentiated images of the destination. Recently, Michael et al. study (2017) indicated that visitors' activities (e.g., engagement in favourite sports or recreational activities) take part could positively influence destination image. A more intense visit appears to influence respondents' perception of how information impacts their destination experience (Vogt & Stewart, 1998).

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Despite these few notable contributions highlighting the central role experience at the destination plays in image formation, there is still a lack of empirical research on how the level of experience intensity determines the components (cognitive, affective) of image. Similarly, Smith et al. (2015, p.115) argue that “destination image may also be affected by contextual factors and experience through the course of a vacation...However, very few empirical studies have been conducted in this direction.” Following the above discussion, this study hypothesizes that visitors' level of destination experience intensity will positively influence their destination image. The following two hypothesis were formulated:

H1 – There is a positive relationship between cognitive destination image and experience intensity level

H2 – There is a positive relationship between affective destination image and experience intensity level

3. Research Methods

3.1 Study setting

The setting of this study is Linz, the capital of the Province of Upper Austria, situated astride the Danube River. Linz is Austria's third largest city with a population of 180000 (World Population Review, 2018). Linz is seen as one of the top performing destinations in Austria, visited by 475 000 domestic and international visitors in 2016, which is more than double compared to 1990 (Austrian Hotel Association ÖHV, 2016). In 2016 the ratio of international to domestic arrivals was 54:46; whereas in previous years this was more equally balanced. The tourism industry in the city supports more than 4,000 full-time jobs in the accommodation sector (around 60 establishments), in restaurants and bars (approximately 1,700 businesses) and in cultural and leisure attractions (Upper Austria Chamber of Commerce, 2015). Despite substantial investment in cultural attractions, museums of modern art (Lentos, Ars Electronica) and three hallmark events ('Cloud of Sound', 'International Street Artist Festival' and 'Ars Electronica'), the city still struggles to escape from its bad reputation generated due to its dark history (known as Hitler's town) and heavy industrial background.

[Figure 1 About Here]

3.2 Survey design

The survey design comprised two stages and was influenced by Jenkins (1999), Echtner and Ritchie (1991) and Martin and del Bosque (2008) studies. In line with these studies, unstructured techniques should be used to elicit the relevant destination image attributes, with researchers then using these attributes in subsequent analysis to construct surveys to investigate tourist images (O'Leary & Deegan, 2005). This technique was preferred as it minimizes the peril of pushing respondents to respond to a standardized framework, which

might be a reflection of the image held by the researcher but not of the population under study.

3.2.1 First Stage

The first stage of the survey design involved a qualitative exploration of the destination image of Linz by eliciting its destination image attributes and dimensions (cognitive and affective) using open-ended questions. Convenience sampling was used while selecting the participants since a sampling frame containing the details of all tourists in Linz was not available. The data was collected until 'a saturation point' was reached (Kumar, 2005), which occurs when the newly collected information repeats already collected data (Maykut & Morehouse, 1994). This technique enables to distil the constructs or attributes most appropriate to the population under investigation (tourists) (Echtner & Ritchie, 1991). Following Echtner and Ritchie (1991), two open-ended questions were used, whereby in the first question respondents' spontaneous associations with Linz as a tourist destination (cognitive image) were explored. The aim of the second question was to gain insights into respondents' feelings and emotions in relation to Linz (affective image). Out of the 150 invited, 88 respondents agreed to participate and answered the questions. After discarding 14 incomplete responses, the final sample consisted of 74 usable responses. The majority of the respondents (74%) were from Great Britain, Germany, Switzerland, Portugal, Italy, Cyprus, France, Poland, Bulgaria and the USA, reflecting to a large extent the profile of international tourists in Linz. About half of the respondents were female and half were male. Conceptual content analysis was applied to analyse the collected data (Wilkinson & Birmingham, 2003). Similar words were grouped into categories with indicative labels, and frequencies of the various types of responses were recorded. In line with Reilly (1990), responses produced by at least 5% of the sample are common enough to be considered.

Throughout this exploratory stage, Linz's cognitive image was found to have been shaped by its Nazi past and relation to Hitler, the steel industry, its architecture and the well-preserved part of the old town; the modern face of Linz reflected on the museums of Modern Art, the Brucknerhaus, its hallmark events (International Street Artist Festival and Bruckner Festival), the natural beauty of Postingberg and the Danube River. In terms of the affective image, Linz was described as an interesting, enjoyable, and modern place. Although the sample used in this exploratory stage could be perceived as relatively small ($n = 74$), the open-ended questions made it possible to elicit some of Linz's unique characteristics and to understand aspects of its individuality.

3.2.2 Second Stage

A questionnaire was developed and utilized for collecting data from tourists visiting Linz. The questionnaire comprised three main sections: The first section measured tourist's cognitive and affective evaluations of image by asking participants to indicate whether Linz possessed certain attributes, on a 6-point Likert-type scale (from '1' strongly agree to '6' strongly disagree). The list of items was developed based on the attributes elicited in the first stage and a subsequent review of the literature on destination image (e.g., Baloglu & McCleary, 1999; Beerli & Martin, 2004; Echtner & Ritchie, 1991; Prayag, 2009). The cognitive image component was evaluated by including among others: Linz's architecture, cultural and religious heritage and natural attractions (see Table 3). The affective component of Linz's image was assessed using adjectives such as enjoyable, interesting, modern, etc. (see Table 4). The second section captured 'visitors' experience intensity' using two main questions. The first question covered the events side (i.e., exhibitions, music, and dance performance) by inviting respondents to tick the events that have already attended or planned to attend during this visit. The 10 events included in the list of options were chosen from the

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Linz's tourism website among those available during the time of the study. The overall event experience score was calculated as the sum of the number of events attended or planned to attend by each individual, with the potential scores ranging from 0 to 10. The second question dealt with the number of attractions visited (or planned to visit) in Linz such as churches, museums, galleries, etc. The 29 attractions included were chosen from the Linz's tourism website and those recommended by TripAdvisor as Linz's key highlights. The attraction score was estimated as the sum of the number of attractions already visited or planned to visit in Linz, with the potential score ranging from 0 to 29. Finally, the third section of the research instrument included a set of questions about the demographic characteristics of the respondents (gender, age, educational level, marital status, and income). To assess the face and content validity of the survey, tourism experts (seven tourism academics, four tourism business owners) and a sample of tourists in Linz were recruited to review the questionnaire. Apart from some minor corrections related to wording, no substantial changes were implemented at that stage. A reliability analysis (Cronbach's alpha) was also performed for the cognitive and affective image scales. The Cronbach's alpha value of both the cognitive image scale and the affective image scale were higher than .70.

The target population of this stage comprised tourists visiting Linz who are aged 18 years old or older. A plethora of studies on destination image have used a non-probability sampling method due to the lack of accurate data regarding the size of the tourist population (Chen & Tsai, 2007; Stepchenkova & Li, 2014). Heterogeneous purposive sampling (Finn, Elliott-White & Walton, 2000) was employed to ensure heterogeneity and variance among the tourists participating in the study, albeit without applying a random sampling method because of the lack of a sampling frame (Stylidis et al., 2017). The data was collected using self-administered questionnaires that were distributed by one of the researchers. The survey took

on average 10 minutes to complete and there was a German and an English version available. Since priority was given to the representativeness of the study's participants, the data collection took place at various locations in Linz and during different days/time of the week (Bonn et al., 2005). Tourists were approached between June and August in the main tourist zone, where the vast majority of Linz's hotels, shops and restaurants are located. Following previous studies (Andereck & Caldwell, 1994; Poria et al., 2006) the questionnaires were collected in different locations in Linz to ensure the diversity of respondents. Respondents were quasi-randomly sampled on the selected sites. This was done by approaching every 5th participant at a certain area of the site. A screening question was asked to ensure that respondents had spent at least one night in Linz at the time of the study (to exclude one-day excursionists and those who had just arrived in Linz). The total sample consisted of 400 tourists. Although the procedure followed assists in achieving a balanced composition of respondents, it may limit the generalizability of the findings to other destinations as it is further discussed in the limitations section. The tourist sample was perceived as mainly homogenous in terms of distance (country of origin) from Linz as the vast majority (97%) of respondents came from other European countries and only a small fraction (3%) represented the rest of the world. To validate its representativeness, the sample profile was compared to the characteristics of Linz's visitors in terms of their nationality. According to statistical data published on TourMIS, it could be concluded that almost a perfect match was assured between the collected data and the official statistics on visitors' nationality.

3.3 Data analysis

3.3.1 Calculation of visitors' experience intensity index

Following the same procedures as Baloglu (2001) in the development of his familiarity index, the visitors' experience intensity index was operationalized as a composite of amount of events (attended/ planned to attend) and attractions (visited/planned to visit). The score for

events ranged from 1 to 10, with a median score of 7, which was used as the dividing point to classify respondents into two groups. The 'low events consumption group' (those attended below or equal to 7 events) was given a score of '1', and the 'high events consumption group' (attended over 7 events) was given a score of '2'. To measure the 'cumulative attraction' (Weidenfeld et al., 2016, p.76) respondents were classified into two categories following the same procedure. Using the median score of 18, respondents who have visited/intended to visit less than or equal to 18 attractions in Linz received a score of '1', whereas those who have visited/intended to visit more than 18 attractions received a score of '2'. By cross-tabulating the two levels of events' and the two levels of attractions' dimensions the following matrix (Table 1) was produced with respondents belonging to one of the four cells:

[Table 1 About Here]

The scores of the two dimensions were summed for each individual, resulting in a 'visitors' experience intensity' index ranging from '2' to '4'. Respondents with a score of '2' were grouped into a 'low intensity' group (n = 63), those with a score of '3' comprised the 'moderate intensity' group (n = 228) and the 'high intensity' group (n = 109) consisted of those who received a score of '4'.

In the first step of the analysis, Principal Component Analysis (PCA) was used to identify the inherent dimensions of the cognitive and affective image scales and to reduce the complexity of the collected data (Hair, Black, Babin & Anderson, 2014). Next, Multivariate Analysis of Variance (MANOVA) followed by a post-hoc Scheffe test was used to assess potential differences in the cognitive and affective image evaluations of Linz across the three experience intensity groups. The Scheffe test was selected as the most conservative procedure

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for controlling family-wise error rate at 0.05 level. Lastly, discriminant analysis was conducted to assess the classification accuracy of the three tourist groups.

4. Findings

4.1 Respondents' profile

The sample comprised 400 respondents, 54% of which are female and 46% are male. Most of the respondents are 46 years old (41%) or older. The second largest age category is those aged 36-45 (23.5%). Most respondents are employed full-time (57%) and have a high level of education, as 35.5% attended a graduate school and 57% had an academic degree (Table 2).

[Table 2 About Here]

4.2 Principal component analysis (PCA) for cognitive image components of Linz

SPSS v.21 was used for the statistical analysis of the collected data. The PCA commenced with the Kaiser–Meyer–Olkin (KMO) measure of sample adequacy, the Bartlett's test of sphericity, and the anti-image correlation matrix to examine the factorability of the data. The KMO coefficient for the cognitive image scale was 0.749 (benchmark is 0.60), and the Bartlett test was significant ($p < .05$) (Tabachnick & Fidell, 2013). The PCA (varimax rotation) for the cognitive image component revealed the existence of seven factors with the total variance explained of 60.19% suggesting a satisfactory factor solution (Table 3). The eligibility of the factor solution was also supported by eigenvalues greater than 1.0 (Tabachnick & Fidell, 2013). Various criteria were used to establish the validity of the seven factors: a) items needed to have factor loadings higher than 0.40 (Hair et al., 2014); b) no item which double-loaded onto multiple factors with coefficients greater than 0.40 was retained (Tabachnick & Fidell, 2013); and c) internal consistency was confirmed by estimating the Cronbach alpha value of each factor. All values were above the recommended benchmark ($\alpha > 0.60$) except for one case ('culture and traditions' with a Cronbach α of .484), which was eliminated from further analysis (Peterson, 1994). The remaining six factors

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were labelled based on the items they comprised: Natural and Built Attractions, Blemish, Contemporary Culture, Events, Aesthetics, and Activities.

[Table 3 About Here]

4.3 Principal component analysis (PCA) for affective image components of Linz

Following the same statistical procedures the affective image component of Linz was subject to PCA. The KMO Measure of Sampling Adequacy had a value of 0.743 and Barlett's Test of Sphericity was significant ($p < .05$). The principal component analysis revealed the existence of five factors with eigenvalues exceeding 1 and explaining 68,55% of the total variance (Table 4). All factors demonstrated convergent and discriminant validity, with the Cronbach α values being equal or higher than 0.6. The five factors were labelled according to the items they comprised: Unattractive, Interesting, Unpleasant, Exquisite and Tranquil.

[Table 4 About Here]

4.4. Impact of experience intensity on destination image

Multivariate Analysis of Variance (MANOVA) was conducted next to assess potential differences across the cognitive and affective image components of Linz attributed to the visitors' experience intensity. The multivariate test (Wilks's Lambda = 0.013, $F_{(22, 774)} = 1.805$; $p < .05$) was significant, suggesting that the three experience intensity groups perceived differently the image dimensions of Linz. A Scheffe post hoc test was conducted to further determine where the differences resided between the three groups (Bonn et al., 2005). Table 5 presents the results of MANOVA and Scheffe tests. Significant differences among the three groups were found in three out of six cognitive image dimensions (Attractions, Blemish, and Contemporary culture) leading to the partial acceptance of Hypothesis 1.

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Namely, the higher the experience intensity level, the more favourable the cognitive image of Linz was perceived. For example, people with high experience intensity evaluated Linz's attractions on average at 3.05, whereas those with low experience intensity at 3.14.

Additionally, tourists in the high experience intensity group were more able to differentiate Linz image from its Blemish past and Hitler in comparison to the low experience intensity group. With regards to Hypothesis 2, significant differences were reported among the three groups in three out of five affective image dimensions (Unattractive, Interesting, Tranquil) leading to the acceptance of H2. In all cases that statistically significant differences were found, the high experience intensity group perceived Linz's affective image more positively than the low intensity group. Experienced tourists tend to disagree more that Linz is unattractive and to agree more that it is an interesting place, in comparison to the less experienced ones. It could, therefore, be concluded that experience intensity appears to have a positive effect on destination image. Namely, some of Linz's cognitive and affective image dimensions were perceived more favourably by the high experience intensity and moderate experience intensity groups than by the low experience intensity group (Table 5).

[Table 5 About Here]

In the last stage, discriminant analysis was conducted to assess the classification accuracy of the three tourist groups. The canonical discriminant function extracted was significant at the .001 level (see Table 6). The canonical correlation value is .273, suggesting that the model explains a significant relationship between the function and the dependent variable (Hosany & Prayag, 2013). The classification results also indicate that the hit ratio is relatively high (48%), that is, for the sample of 400 observations, 48% ($n = 192$.) of the sample respondents were correctly classified in their respective cluster by the discriminant functions (Hair et al.,

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2014). This percentage varied from 40% for the low intensity group, to 50% for the moderate intensity group, to 49% for the high intensity group.

[Table 6 About Here]

5. Discussion

The aim of this study was to shed some light on destination image formation by exploring whether image is altered as a result of tourist's experience intensity with a destination. To achieve this aim a 'visitor experience intensity' index was proposed and calculated based on the amount of events and attractions visitors have already attended/visited or were planning to attend/visit during their stay. Respondents with a score of '2' were grouped into a 'low intensity' group ($n = 63$), those with a score of '3' were grouped into the 'moderate intensity' group ($n = 228$) and those who received a score of '4' comprised the 'high intensity' group ($n = 109$). MANOVA followed by Scheffe post-hoc test was used to assess potential differences in the cognitive and affective image evaluations of Linz across the three experience intensity groups. The results revealed that the higher the experience intensity, the more favourable the cognitive and affective evaluations of destination image, indicating that tourists' experiences are central in the formation of the in-situ destination image. Lastly, the discriminant analysis verified the classification accuracy of the three tourist groups.

Tourists in the 'low experience intensity' group have attended/were planning to attend below or equal to seven events and have visited/intended to visit up to 18 attractions during their stay in Linz. People belonging to this group appeared to be neutrally predisposed towards the natural and built attractions provided by Linz. They tend to associate to a certain extent Linz with contemporary culture but also with Hitler and its industrial background. They also agree that Linz is interesting and tranquil. Tourists in the 'moderate experience intensity' group relate Linz to a lesser extent to its blemish past than the low experience group. Members of the moderate group agree also less fervently that Linz provides opportunities to experience contemporary culture. Lastly, people in the third group termed 'high experience intensity' perceive more favourably Linz's attractions and assess the city as an interesting destination to visit.

The study findings suggest that experience intensity is positively linked to some dimensions of the cognitive image component (H1). This is in line with previous studies which also reported that direct experience with the destination positively enhances tourists' perceptions of the cognitive image (Baloglu, 2001; MacKay & Fesenmaier, 1997; Smith et al., 2015). Tourists, in particular, who participate at local events and visit attractions, seem to develop an improved understanding and appreciation of Linz's offerings and contemporary culture. At the same time they appear less likely to associate Linz to its dark history including Hitler and the steel industrial background. Similarly, Kim et al. (2019), Vogt and Andereck (2003) and Vogt and Stewart (1998) revealed that destination experience positively modified tourists' cognitive image of Arizona. For example, Kim et al. (2019) also reported that tourists' negative images (related to war) of Vietnam appeared to fade away as time went by in the trip. Fakeye and Crompton (1991) also argued that longer stay is linked to participation in more activities, which in turn leads to more differentiated images of the destination. However, contrary to past research (Smith et al., 2015; Vogt and Andereck, 2003), this study found that the significance of experience intensity is not only limited to the enhancement of the cognitive image, but its influential role extends to the affective image domain (H2). Those in the 'high experience intensity' group perceived Linz as more interesting and tranquil destination and were less likely to agree that it is unattractive. This result corroborates Prahalad and Ramaswamy (2004) work which reported that visitors often develop emotional responses towards some of the attractions they visit. Overall, the findings of this study provide evidence to support Ashworth's (1989) proposition that there is a positive relationship between destination image and activities travellers engage in at the destination.

The findings also suggest that some of the differences in the cognitive image were reported among the 'low experience intensity' and the 'moderate experience intensity' group. This is

in line with findings in other fields that the exposure-attitude relationship depends on the number of exposures to the stimulus, with some researchers reporting that favourable ratings begin to drop after 10 exposures (Stang & O'Connell, 1974; Zajonc et al., 1972). In the context of destination image, this symptom was noticed after people have attended over 7 events and visited more than 18 attractions. However, this phenomenon appears not to be present in the case of the affective image, as the 'high visitors' experience intensity' group evaluated this image component more favourably in comparison to the other two visitor groups. It thus appears that exposure to a destination's events and attractions after a certain point does not significantly alter people's opinion, knowledge and belief, but is more critical in shaping their feelings and emotions towards it.

5.1 Implications

The findings of this study have theoretical, methodological and managerial implications. From a theoretical standpoint, it is one of the only studies of its kind to apply Zajonc's (1968) 'mere exposure theory' in the destination image field, further extending the application of this theory to tourism. This study also provides empirical support for the role visitors' experience intensity play in the in situ destination image formation. By addressing a significant, but still neglected image determinant this study, therefore, contributes to a better understanding of the destination image development process. A profound understanding of image is of significant importance for destinations striving to improve and strengthen their positioning on the competitive tourist market. Results also indicate that destination image is affected by experience through the course of a vacation (by visiting more attractions/events), thus responding to Smith et al.'s (2015) call for additional research on this area. Lastly, the study expands our knowledge on the role of attractions on destination image formation as it has recently being argued that their contribution to the appeal of destinations remains largely ignored in empirical studies (Weidenfeld, et al., 2016). From a methodological perspective,

this research developed an innovative way of operationalizing tourists' on site experience by creating an intensity index that represents tourists' different levels of 'intensity' with the place in terms of visited or planned to visit events and attractions. The three groups developed based on the index scores ('low intensity', 'moderate intensity', 'high intensity') exhibited significant differences in the way they evaluated the various dimensions of the cognitive and affective image of Linz, granting support for the external validity of the index.

The results can also prove beneficial to tourism practitioners and destination marketers. It became evident from the analysis that destination image is shaped by the intensity at which visitors experience a destination, indicating that the variety and type of attractions and events are influential in developing and re-generating destination image. Investing in, developing and promoting a variety of places of interest expands visitors' knowledge about a destination. This positive change could also improve their attitude towards it, which increases the likelihood of establishing a strong destination image and brand. This implicates that tourist packages of a longer duration, accommodation discounts for extensive stays, free entrance or discounts for attractions and events can be used as strategic instruments for enhancing destination image. Local DMOs and tourism marketers should also attempt to foster tourists' intention to visit as many local events and attractions as possible by actively promoting them in all relevant websites, but also through social media platforms that tourists use (TripAdvisor, etc.) (Mistilis, Buhalis & Gretzel, 2014). Additionally, increasing the availability of key attractions and planning special events are additional examples of how DMOs can further increase 'visitors' experience intensity' with subsequent positive effects on their destination image. The findings here also highlight the importance of hosting various events throughout the year as this will result in keeping visitors engaged with the place, especially as a positive link between event image and destination image has been established in the literature (Kaplanidou & Vogt, 2007; Kim et al., 2014). Lastly, it would be in the best

interest of DMOs to assess visitors' experience intensity in a proactive manner using measures such as the index proposed here, with regular updates to incorporate the new attractions and events that constantly emerge.

5.2 Limitations and future research directions

Despite its contribution, the study is not free from limitations. First, given that the research was conducted on a single setting, replicating the study in different contexts would help to cross-validate its findings. Second, the data were collected over a particular time frame (summer), which might have affected the availability of some events/attractions. Third, the study was based on the grounds that higher experience intensity leads to more positive destination image. However, it could also be argued that the 'level of psychological involvement' with the destination or the destination image held before hand might have influenced tourists' intention to visit a certain amount of events and attractions. Future research should aim to further test these relationships. Similarly, other important measures were excluded from the analysis such as length of stay in Linz, trip purpose, previous visitation at the destination and destination personality. Future research should be conducted to understand tourists' images considering also destination personality, tourists' future behavioural intentions and level of familiarity with the destination. Lastly, this study was among the first to empirically link these two concepts (experience intensity and image). Future studies should be conducted to further understand how experience with particular attractions and events is related to the image of a destination, considering also the personal interests of tourists.

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Table 1: Visitors' experience intensity index

Attractions dimension	Events dimension	
	<i>Low (1)</i>	<i>High (2)</i>
<i>Low (1)</i>	63(1+1)	72(1+2)
<i>High (2)</i>	156 (2+1)	109 (2+2)

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Table 2. Respondents' profile

	Sample <i>n</i> = 400
Gender	
Female	54%
Male	46%
Age	
18-25	8.5%
26-35	20.8%
36-45	23.5%
46-55	29.5%
56+	17.8%
Employment	
Full-time	57.5%
Part-time	16.3%
Student	7.3%
Retired	15.5%
Other	3.5%
Education	
Primary	7.3%
Secondary	35.5%
Tertiary	57.3%

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Table 3: PCA for the Cognitive Image Component

Factor/Item	Factor Loading	Variance Explained	Cronbach Alpha
Factor I: Natural and Built Attractions		18.86	.79
Alps	.83		
Snow/Winter	.74		
Monuments	.70		
Museums	.61		
Bicycle Paths	.54		
Ancient Origin	.50		
Factor II: Blemish		10.58	.84
Heavy Industry	.93		
Steel Industry	.90		
Hitler	.76		
Factor III: Contemporary Culture		8.08	.76
Lentos	.85		
Modern Art	.78		
Ars Electronica Center	.78		
Factor IV: Events		7.37	.70
International Street Artist Festival	.78		
Bruckner Festival	.78		
Bruckner	.63		
Football	.49		
Factor V: Aesthetics		5.59	.68
Old Churches	.81		
Old Town	.72		
Architecture	.71		
Factor VI: Culture and Traditions		5.05	.48
Cultural Heritage	.68		
Austrian Cuisine	.54		
Factor VII: Activities		4.67	.61
Postlingberg	.81		
Shopping	.77		

Scale: '1' strongly agree to '6' strongly disagree. Total variance explained: 60.19%.

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Table 4: PCA for the affective image component

Factor/Item	Factor Loading	Variance Explained	Cronbach Alpha
Factor I: Unattractive		29.42	.76
Dark	.86		
Cold	.85		
Poor	.67		
Factor II: Interesting		13.28	.73
Modern	.81		
Interesting	.80		
Enjoyable	.66		
Factor III: Unpleasant		9.76	.64
Unpleasant	.83		
Boring	.79		
Factor IV: Exquisite		8.74	.74
Admirable	.88		
Beautiful	.80		
Factor V: Tranquil		7.36	.60
Calm	.84		
Neat	.79		

Scale: '1' strongly agree to '6' strongly disagree. Total variance explained: 68.55%.

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Table 5: Results of MANOVA with post-hoc Scheffe test

Image Components and Dimensions	Low visitors' experience intensity n= 63	Moderate visitors' experience intensity n= 228	High visitors' experience intensity n=109	F-value	Significance
Cognitive Image					
Attractions	3.14 ^a	3.05	3.05 ^b	4.75	0.01
Blemish	3.06 ^a	3.15 ^b	3.17	.32	0.02
Contemporary					
Culture	1.39 ^{a,b}	1.57 ^b	1.65 ^a	3.08	0.04
Events	3.22	3.45	3.32	1.13	0.32
Aesthetics	1.28	1.19	1.22	1.66	0.19
Activities	1.48	1.46	1.56	1.58	0.20
Affective Image					
Unattractive	4.67 ^a	4.66	4.73 ^b	0.68	0.04
Interesting	1.96 ^a	1.93	1.90 ^b	.047	0.03
Unpleasant	4.79	4.74	4.75	.214	0.81
Exquisite	1.86	1.89	2.03	1.66	0.19
Tranquil	2.27 ^{a,b}	2.40 ^a	2.22 ^b	3.20	0.04

^{a,b} Mean scores with different letters are significantly different at 0.05 level. *Scale: '1' strongly agree to '6' strongly disagree*

Table 6. Discriminant analysis

Discriminant Functions Results					
Discriminant Functions	Eigenvalue	Cannonical correlation	Wilk's lambda	Chi-square	Significance
1	.08	.27	.01	40.69	.01
2	.03	.16	.97	10.25	.42

Actual group	No of cases	Predicted group membership^a		
		Low Intensity	Moderate Intensity	High Intensity
Low intensity	63	25 (39.7%)	20 (31.7%)	28 (28.6)
Moderate intensity	228	57 (25%)	115 (50.4%)	56 (24.6%)
High Intensity	109	33 (30.3%)	23 (21.1%)	53 (48.6%)

^a 48.3% of original grouped cases correctly classified

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Figure1: Map of Austria

Source: <http://worldpopulationreview.com>